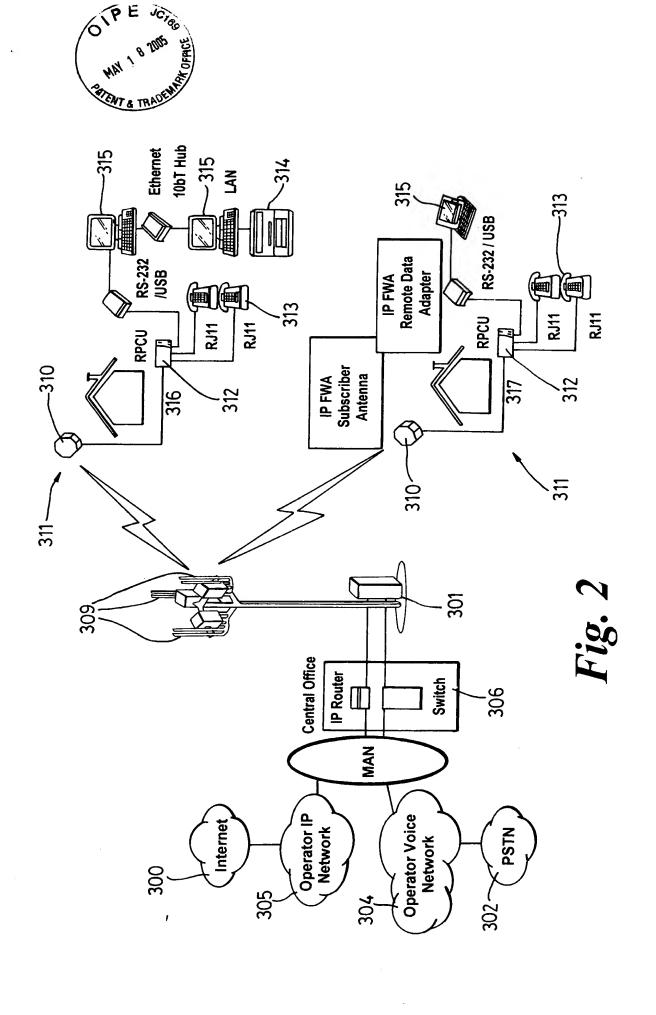


Fig. 1 (PRIOR ART)





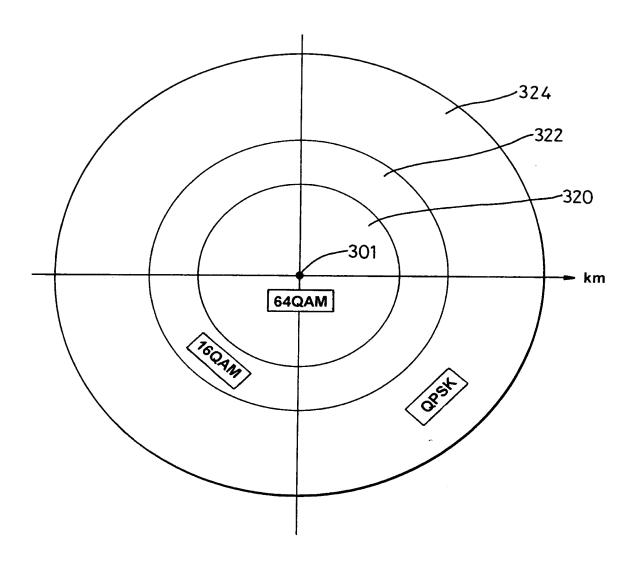


Fig. 3

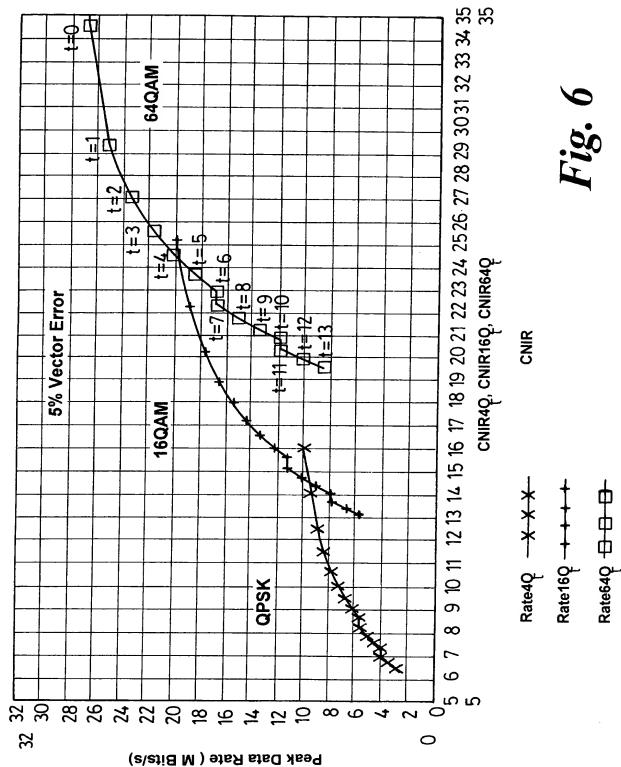


A data/voice/CBR/VBR connection is routed to a basestation through it's destination address or a connection is opened by a subscriber. Establish required quality of Each queue is assigned a quality of service service (queuing priority). Either from connection request from Each logical connection is routed into a data transmission base station or request from queue. The data is partitioned into blocks and a MAC Step (iii) subscriber. header is added to each block. Each block is assigned a modulation scheme and a coding Link information - CNIR estimation measured at level in accordance with the transmission link over which subscriber (CPE) and the block is to be transmitted. Step (iv) transmitted to base station. Step (v) Each block in each queue is then further partitioned and appropriate block coding is appended. Step (vi) Blocks are grouped according to modulation level (this forms the physical payload) and a physical header is prepended. This header is always in 4QAM and includes a preamble, a sync sequence and information stating the modulation level of the following physical payload. Step (vii) The data from each queue is sent to the data scheduler and transmitted to the subscribers in order determined by quality of service attached to each queue. Step (viii) Payload data recovered in subscriber receiver. Fig. 4 Step (ix)



Data packets/blocks constituting a data/voice/CBR/VBR connection are input to the subscriber network termination. Step (i) Establish required quality of Each queue is assigned a quality of service. service (queuing priority). Either from connection request from Each logical connection is routed into a data transmission base station or request from queue. The data is partitioned into blocks and a MAC subscriber. Step (iii) header is added to each block. Step (ii) Link information - CNIR Each block is assigned a modulation scheme and a coding estimation measured at Base level in accordance with the transmission link over which Station (BS) and transmitted the block is to be transmitted. Step (iv) to subscriber. Step (v) Each block in each queue is then further partitioned and appropriate block coding is appended. Step (vi) Blocks are grouped according to modulation level (this forms the physical payload) and a physical header is prepended. This header is always in 4QAM and includes a preamble, a sync sequence and information stating the modulation level of the following physical payload. Step (vii) The data from each queue is sent to the data scheduler and transmitted to the base station in order determined by quality of service attached to each queue. Step (viii) Fig. 5 Payload data recovered in base station receiver. Step (ix)







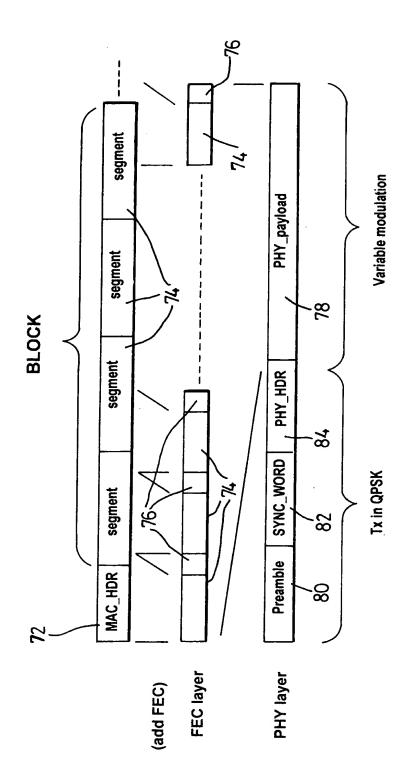


Fig. 7

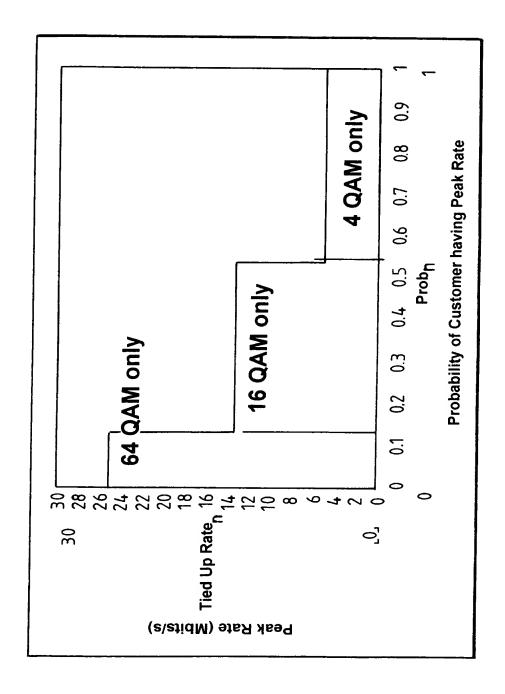


Fig. 8a

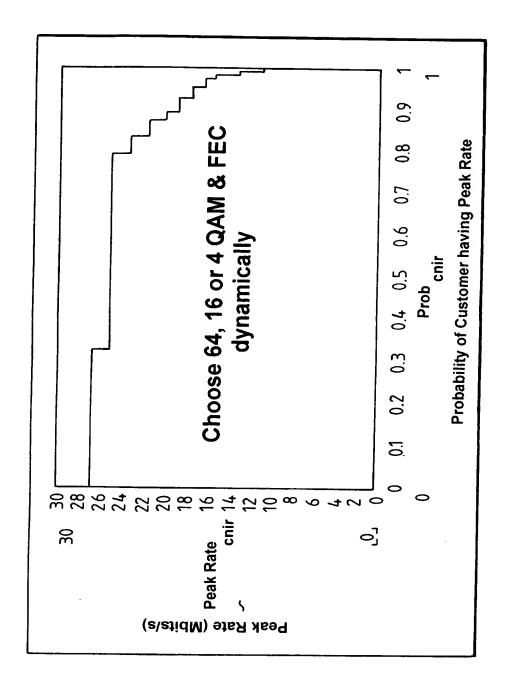
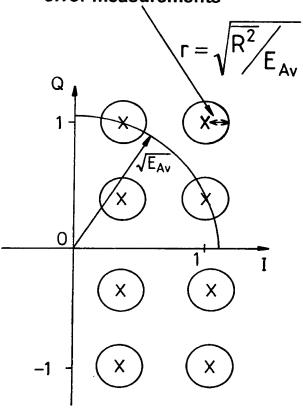


Fig. 8b



The R are the actual vector error measurements



16QAM

Fig. 9

